

The location and condition shift registers are binary shift registers and will be filled by "1" or "0". In the case of the location shift register "1" represents the fact the cell contains product and "0" means the cell is empty. In the condition shift register "1" represents an acceptable product and "0" represents an unacceptable product.

The lot data shift register is a non-binary shift register and contains data pertaining to the manufacture and/or prescription of the contact lens. The lot shift register may contain the data necessary for the manufacturing process or may comprise a pointer or link to a computer file containing the data. For convenience, the numeral "3" represents the lot data for the first lot and the numeral "5" represents the data for the second lot.

The arrow marked A represents a sensor in the production line for determining whether the product passes or fails a particular test. The sensor may detect the presence or absence of product, read a bar code and compare with lot data information, inspect a lens e.g. as disclosed in WO 2004/056555, detect the presence of a label or a blister package etc. If the product passes the test the condition shift register will be marked "1" and if the product fails the test the condition shift register will be marked as "0".

The arrow marked B represents a reject mechanism on the production line. In the event the condition shift register is marked "1" the reject mechanism will not operate. In the event the condition shift register is marked "0" the reject mechanism will operate ejecting the product from the production line and therefore the location shift register will be altered from "1" to "0". Diagrams (a) and (b) illustrate this concept with Diagram (a) showing detector A failing a product in the cell and Diagram (b) shows the production line after the shift registers have been indexed by one cell showing the reject mechanism B ejecting the product from the production line. The reject mechanism may comprise a sensor to confirm the product has been ejected. The ejection of the product results in the location register being marked "0".

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5. A method as claimed in Claim 4 in which the processing event is selected from resetting a processing station, wiping data from a processing station and instigating a reporting action.
- 5 6. A method as claimed in any preceding claim in which a gap comprising a predetermined number of empty cells is inserted between successive manufacturing lots on the production line and the control system comprises a gap defence mechanism including detectors and counters to monitor said gap as it proceeds down the production line.
- 10 7. A method as claimed in any preceding claim in which information from the lot data shift register is used to control the activity of a cell.
8. A method as claimed in any preceding claim which comprises the step
15 of inspecting the product in a cell and/or monitoring the production activity in a cell and comparing the resulting data with data in the lot data shift register.
9. A method as claimed in any preceding claim in which information in the condition shift register is used to trigger ejection of a product from the
20 production line.
10. A method as claimed in Claim 9 in which ejection of product from the production line causes the location shift register to change to signify the cell is empty of product.